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10/760,472	01/21/2004	Joan Evelyn Conover	SAIC0008-CON1	2030
27510 7590 06/28/2007 KILPATRICK STOCKTON LLP 607 14TH STREET, N.W. WASHINGTON, DC 20005			EXAMINER PHAM, HUNG Q	
			ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/760,472

Applicant(s)

CONOVER ET AL.

Examiner

HUNG Q. PHAM

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 33 and 36-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 33 and 36-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☒ Interview Summary (PTO-413)
Paper No(s)/Mail Date 20070620
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

Double Patenting

A terminal disclaimer has not been provided. Therefore, the double patenting rejection is sustained.

Claim Rejections - 35 USC § 101

The rejection of claims 33 and 36-45 under 35 U.S.C. § 101 has been withdrawn in view of the amendment.

Claim Rejections - 35 USC § 112, second paragraph

The rejection of claims 33 and 42 under 35 U.S.C. § 112, second paragraph, has been withdrawn in view of the amendment.

Claim Rejections - 35 USC § 103

- Applicant's arguments with respect to the rejection of claims 33, 36-40 and 42-45 under 35 U.S.C. § 103 have been fully considered but they are not persuasive.

As argued by applicant:

The undersigned submits that in view of the amendments to claims 33 and 42, Teare does not operate on catalogued documents as per the limitations prior to "computing device..." or "creating meta-data..." and does not store metadata that includes keywords, one or more matched words or classmark in a pre-defined data structure. Teare has no regard for the status of the document as being previously catalogued in accordance with keyword matching and classification as described in the preceding limitations of claims 33 and 42. Accordingly, the undersigned submits that the combination of Marques and Teare does not render the claims obvious.

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The examiner respectfully disagrees.

As disclosed by Marques, documents are assembled and categorized at Customer Internet Server, where a Channel Map is created. Each entry in the Channel Map may include a list of channels in which documents are to appear (Marques, Col. 3 Lines 35-45). Each channel represents a category or group of categories of related information (Marques, Col. 2 Lines 50-52). A sample Channel Map is copied as below:

TYPE	SERVER	DIRECTORY	CHANNELS
Web	HR	/publish/benefits/401k	401k
Web	HR	/publish/jobopenings	Jobs
Web	Marketing	/publish/product/specs	Product Specs
Web	www.badoo.com	/pub/product/specs	Competition Specs
Web	www.goodco.com	/pub/product/electronic	Customer Products
PCFile	engineering	/projects/chipdesigns	Chip Designs
PCFile	marketing	/reports/companalysis	Competitive Anly.
FTP	engineering	/projects/status	Status Reports
Notes	engineering	/specs/chipspeed	AI200 Design

The Marques technique as discussed indicates *a computing device*, e.g., Customer Internet Server, *for creating metadata indicative of each of the catalogued documents*, e.g., 401K, Jobs, Product Specs... and *indexing each of the documents in an index of an integrated library according to the metadata*, e.g., the document is listed in corresponding Channel of Channel Map according to Channel name such as Jobs, wherein *the metadata including a keyword*, e.g., the URL.

As disclosed by Teare, FIG. 1 indicates *a pre-defined data structure* for storing the metadata, e.g., the URL.

In light of the foregoing arguments, Marques and Teare disclose every limitation in the claims. Therefore, the rejection of claims 33, 36-40 and 42-45 under 35 U.S.C. § 103 is hereby sustained.

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- Applicant's arguments with respect to the rejection of claim 41 under 35 U.S.C. § 103 have been fully considered but they are not persuasive. The dependent claim 41 is unpatentable for at least the foregoing reasons.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 33 and 42 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 6 and 8, of U.S. Patent No. 6,701,314. Although the conflicting claims are not identical, they are not patentably distinct from each other.

Claims 33 and 42 of the current application are obvious over claims 1, 6 and 8 of USP 6,701,314. The XML format as in claim 8 of USP 6,701,314 is a predefined data structure for storing metadata, obviously comprises *at least one of the following attributes a keyword, one or more*

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matched words, a classmark as recited in claim 1 of USP 6,701,314, e.g., metadata indicative of each of the documents as defined by each of the documents' keywords.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 33 and 42 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claims 33 and 42, the claimed limitations, *indexing each of the documents in an index of an integrated library according to the metadata and the index retains characteristics of each of the multiple heterogeneous repositories as applied to each of the documents such that a user may access one or more of the documents within the multiple heterogeneous repositories utilizing the index, and further wherein the characteristics of the multiple heterogeneous repositories are transparent to the user when one or of the documents are accessed using the index*, were not described in the specification.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 33 recites the limitation *the meta-index* at line 13. There is insufficient antecedent basis for this limitation in the claim¹.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 33, 36-40 and 42-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marques [USP 6,182,066] in view of Teare et al. [USP 6,151,624].

Regarding claim 33, Marques teaches *a system for automatically cataloguing documents located in multiple heterogeneous repositories to facilitate document search and retrieval capabilities* (Marques, Abstract), the system comprising:

a scanning tool for scanning the multiple heterogeneous repositories to collect keywords for the documents located therein (Crawler is used to seek out the documents from external and internal sources as shown in FIG. 2 via word searching (Marques, Col. 3, Lines 28-34). As seen, crawler *a scanning tool for scanning the multiple heterogeneous repositories, e.g., external and internal sources of FIG. 2, and the purpose is to collect keywords for the documents located therein* (Marques, Col. 5, Lines 46-65));

a keyword index to the documents built using the collected keywords (Content of collected document are tokenized into term string and replaced by 32 bit integers, and mapped to an entry of vector as *a keyword index to the documents* (Marques, Col. 5, Line 46-Col. 6, Line 7));


a mapping tool for cataloguing the documents using the keyword index to one or more classes, each of the one or more classes including keywords representative of that class (Marques, Col. 3, Lines 35-56, Col. 6, Lines 6-7 and 13-22 and Col. 7, Lines 51-55);

a computing device for creating metadata indicative of each of the catalogued documents and indexing each of the documents in an index of an integrated library according to the metadata, wherein the metadata for each of the document indexed within the meta-index structure including at least one of the following attributes a keyword, one or more matched words, and a classmark (As disclosed by Marques, documents are assembled and categorized at Customer Internet Server, where a Channel Map is created. Each entry in the Channel Map may include a list of channels in which documents are to appear (Marques, Col. 3 Lines 35-45). Each channel represents a category or group of

¹ For the purpose of examination, this limitation is considered as the index at line 11.

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categories of related information (Marques, Col. 2 Lines 50-52). A sample Channel Map is copied as below:



TYPE	SERVER	DIRECTORY	CHANNELS
Web	HR	/publish/benefits/401k	401k
Web	HR	/publish/jobopenings	Jobs
Web	Marketing	/publish/product/specs	Product Specs
Web	www.badco.com	/pub/products/specs	Competitive Specs
Web	www.goodco.com	/pub/products/electronic	Customer Products
PCFile	engineering	/projects/chipdesigns	Chip Designs
PCFile	marketing	/reports/companalysis	Competitive Anly.
FIP	engineering	/projects/status	Status Reports
Notes	engineering	/specs/chipseed	AL200 Design

The Marques technique as discussed indicates *a computing device*, e.g., Customer Internet Server, *for creating metadata indicative of each of the catalogued documents*, e.g., 401K, Jobs, Product Specs... and *indexing each of the documents in an index of an integrated library according to the metadata*, e.g., the document is listed in corresponding Channel of Channel Map according to Channel name such as Jobs, wherein *the metadata including a keyword*, e.g., the URL);

wherein the index retains characteristics of each of the multiple heterogeneous repositories as applied to each of the documents such that a user may access one or more of the documents within the multiple heterogeneous repositories utilizing the index, and further wherein the characteristics of the multiple heterogeneous repositories are transparent to the user when one or of the documents are accessed using the index (Each entry of Channel Map retains the repository location, e.g., www.badco.com, such that a user can access the document utilizing the repository location, the repository location is transparent to the user when using a browser such as Internet Explorer to access the document).

The missing of Marques' system is *a pre-defined data structure* for storing metadata.

Teare teach a mechanism for associating metadata with network resources (Teare, Abstract). FIG. 1 as taught by Teare indicates *a pre-defined data structure* for storing the metadata, e.g., the URL.

As strongly suggested by Teare, URLs are difficult to remember (Teare, Col. 2 Line 45). An URL that is accurate one day might be inaccurate the next day, so that the network resource cannot be located (Teare, Col. 2 Lines 63-65).

It would have been obvious for one of ordinary skill in the art at the time the invention was made to store metadata into a predefined structure as taught by Teare. By storing the metadata in a predefined data structure, the network resource can be located easily without the need to remember the URL of the resource.

Regarding claim 42, Marques teaches *a method for automatically cataloguing documents located in multiple heterogeneous repositories to facilitate document search and retrieval capabilities* (Marques, Abstract), comprising:

scanning the multiple heterogeneous repositories to collect keywords from the documents located therein (Crawler is used to seek out the documents from external and internal sources as shown in FIG. 2 via word searching (Marques, Col. 3, Lines 28-34). As seen, crawler a scanning tool for *scanning the multiple heterogeneous repositories*, e.g., external and internal sources of FIG. 2, and the purpose is *to collect keywords for the documents located therein* (Marques, Col. 5, Lines 46-65));

building a keyword index to the documents stored in the multiple heterogeneous repositories using the collected keywords (Content of collected document are tokenized into term string and replaced by 32 bit integers, and mapped to an entry of vector as *a keyword index to the documents stored in the multiple heterogeneous repositories using the collected keywords* (Marques, Col. 5, Line 46-Col. 6, Line 7));

cataloguing the documents using the keyword index into predetermined classes, wherein the cataloguing is performed using at least one mapping tool (Marques, Col. 3, Lines 35-56, Col. 6, Lines 6-7 and 13-22 and Col. 7, Lines 51-55);

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creating metadata information, including the identification of the predetermined class, for the document (Marques, Col. 3, Lines 35-57);

indexing each of the documents in an index of an integrated library according to the metadata, wherein the metadata for each of the document indexed within the meta-index structure including at least one of the following attributes a keyword, one or more matched words, and a classmark (As disclosed by Marques, documents are assembled and categorized at Customer Internet Server, where a Channel Map is created. Each entry in the Channel Map may include a list of channels in which documents are to appear (Marques, Col. 3 Lines 35-45). Each channel represents a category or group of categories of related information (Marques, Col. 2 Lines 50-52). A sample Channel Map is copied as below:

TYPE	SERVER	DIRECTORY	CHANNELS
Web	HR	/publish/benefits/401k	401k
Web	HR	/publish/jobopenings	Jobs
Web	Marketing	/publish/product/specs	Product Specs
Web	www.zadco.com	/pub/product/specs	Competitive Specs
Web	www.goodco.com	/pub/products/electronic	Customer Products
PCFile	engineering	/projects/chipdesigns	Chip Designs
PCFile	marketing	/reports/companalysis	Competitive Anly.
FTP	engineering	/projects/status	Status Reports
Notes	engineering	/specs/chipspeed	A1200 Design

The Marques technique as discussed indicates *a computing device, e.g., Customer Internet Server, for creating metadata indicative of each of the catalogued documents, e.g., 401K, Jobs, Product Specs... and indexing each of the documents in an index of an integrated library according to the metadata, e.g., the document is listed in corresponding Channel of Channel Map according to Channel name such as Jobs, wherein the metadata including a keyword, e.g., the URL;*

wherein the index retains characteristics of each of the multiple heterogeneous repositories as applied to each of the documents such that a user may access one or more of the documents within the multiple heterogeneous repositories utilizing the index, and further wherein the characteristics of the multiple heterogeneous repositories are transparent to the user when one or of the documents are accessed using the index (Each entry of Channel Map retains the repository location, e.g.,

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www.badco.com, such that a user can access the document utilizing the repository location, the repository location is transparent to the user when using a browser such as Internet Explorer to access the document).

The missing of Marques' system is *a pre-defined data structure* for storing metadata:

Teare teach a mechanism for associating metadata with network resources (Teare, Abstract). FIG. 1 as taught by Teare indicates *a pre-defined data structure* for storing the metadata, e.g., the URL.

As strongly suggested by Teare, URLs are difficult to remember (Teare, Col. 2 Line 45). An URL that is accurate one day might be inaccurate the next day, so that the network resource cannot be located (Teare, Col. 2 Lines 63-65).

It would have been obvious for one of ordinary skill in the art at the time the invention was made to store metadata into a predefined structure as taught by Teare. By storing the metadata in a predefined data structure, the network resource can be located easily without the need to remember the URL of the resource.

Regarding claims 36 and 44, Marques and Teare, in combination, teach all of the claimed subject matter as discussed above with respect to claims 33 and 42, Teare further discloses *the metadata is stored in eXensible Markup Language (XML) format* (Teare, Col. 6, Lines 26-34).

Regarding claims 37 and 45, Marques and Teare, in combination, teach all of the claimed subject matter as discussed above with respect to claims 33 and 42, Teare further discloses *the metadata is stored in Resource Description Framework (RDF) format* (Teare, Col. 6, Lines 35-39).

Regarding claim 38, Marques and Teare, in combination, teach all of the claimed subject matter as discussed above with respect to claim 33, Marques further discloses *the scanning tool is at least one spider* (Marques, Col. 3, Lines 28-34).

Regarding claim 39, Marques and Teare, in combination, teach all of the claimed subject matter as discussed above with respect to claim 33, Marques further discloses *the mapping tool is a domain ontology* (Marques, Col. 3, Lines 35-56).

Regarding claim 40, Marques and Teare, in combination, teach all of the claimed subject matter as discussed above with respect to claim 39, Marques further discloses *the domain ontology is a classification hierarchy* (Marques, Col. 3, Lines 35-56).

Regarding claim 43, Marques and Teare, in combination, teach all of the claimed subject matter as discussed above with respect to claim 42, Marques further discloses *scanning the at least one information repository to collect keywords is performed by a spider* (Marques, Col. 3, Lines 28-34).

Claims 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Marques [USP 6,182,066] and Teare et al. [USP 6,151,624] as applied to claim 33, and further in view of Becker [USP 6,301,579 B1].

Regarding to claim 41, Marques and Teare, in combination, teach all of the claimed subject matter as discussed above with respect to claim 33, but fail to disclose *the mapping tool is*

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a neural network. Becker teaches a method for constructing a decision table classifier (Becker, Abstract). Becker further discloses neural network as a well-known type classifier (Becker, Col. 2, lines 7-20). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Marques and Teare system by including a neural network for classification in order to organize electronic documents for storage and subsequent retrieval.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUNG Q. PHAM whose telephone number is 571-272-4040. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, TIM T. VO can be reached on 571-272-3642. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

H. Q. Pham

HUNG Q PHAM
Primary Examiner
Art Unit 2168

June 14, 2007